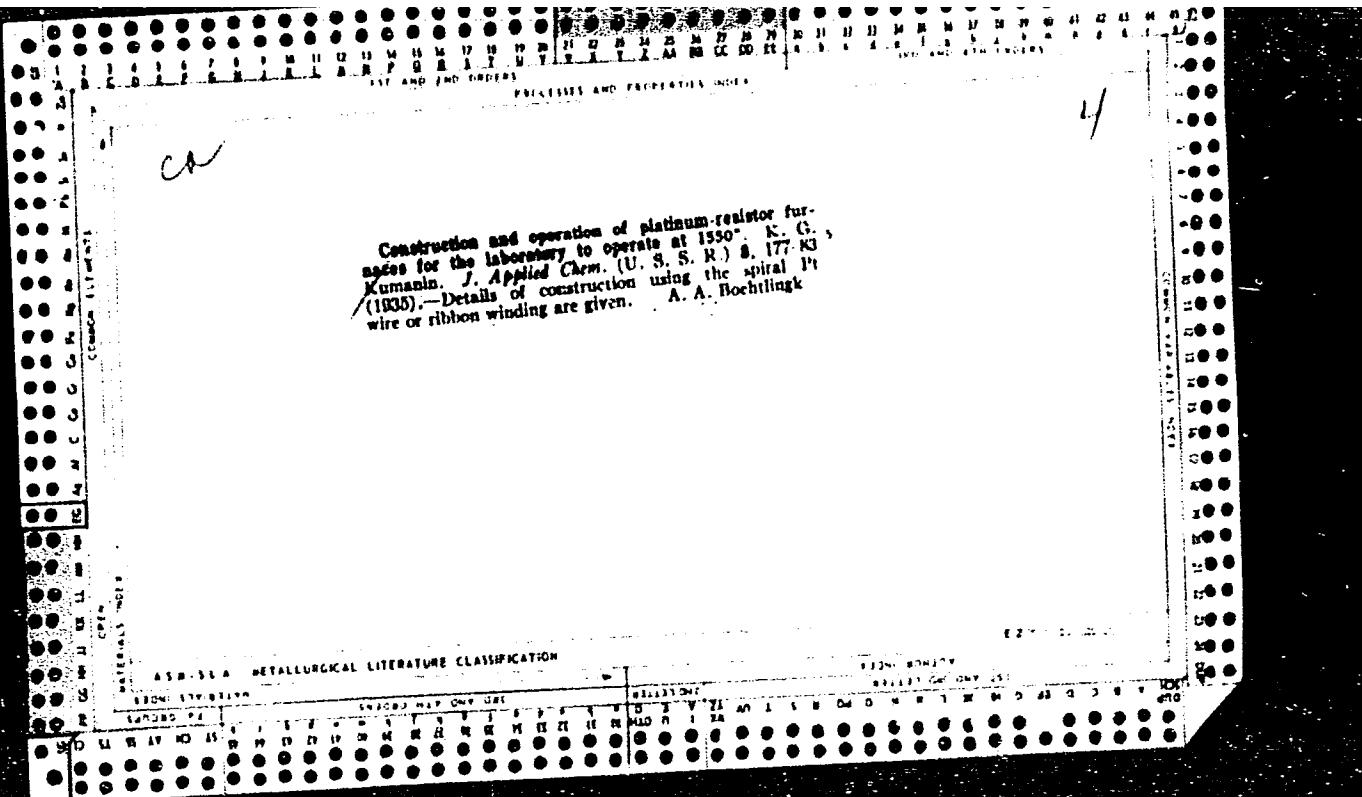
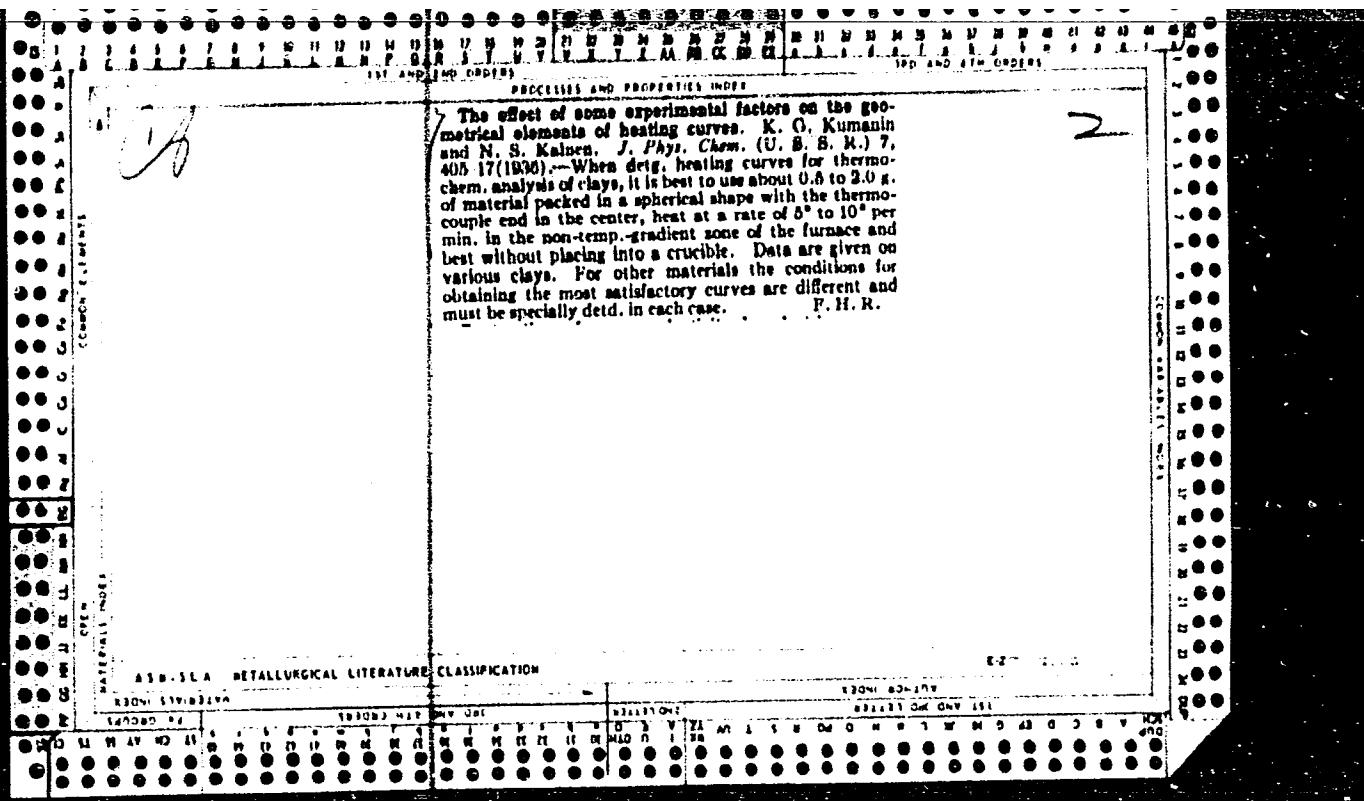


19

Use of highly aluminum materials in the manufacture
of pots for melting optical glass. O. L. Efremov and
K. O. Kumanin. *Krem. i Staklo* 11, No. 12, 13-18
(1934).—The results of studies showed that: (1) The
introduction of finely ground kyanite into the mix for
glass-melting pots considerably increases the resistance of
the pots to the attack of the glass melt. (2) The most
effective method was that of using protective kyanite
coats on the inside of the pot. (3) The thermal stability
of the pots is greatly increased when a dense lining is
used on a porous body. (4) Refractory clay with a high
iron content can be used for the production of the pot
body without affecting the quality of the glass, provided
that it is coated with a protective layer. M. V. K.

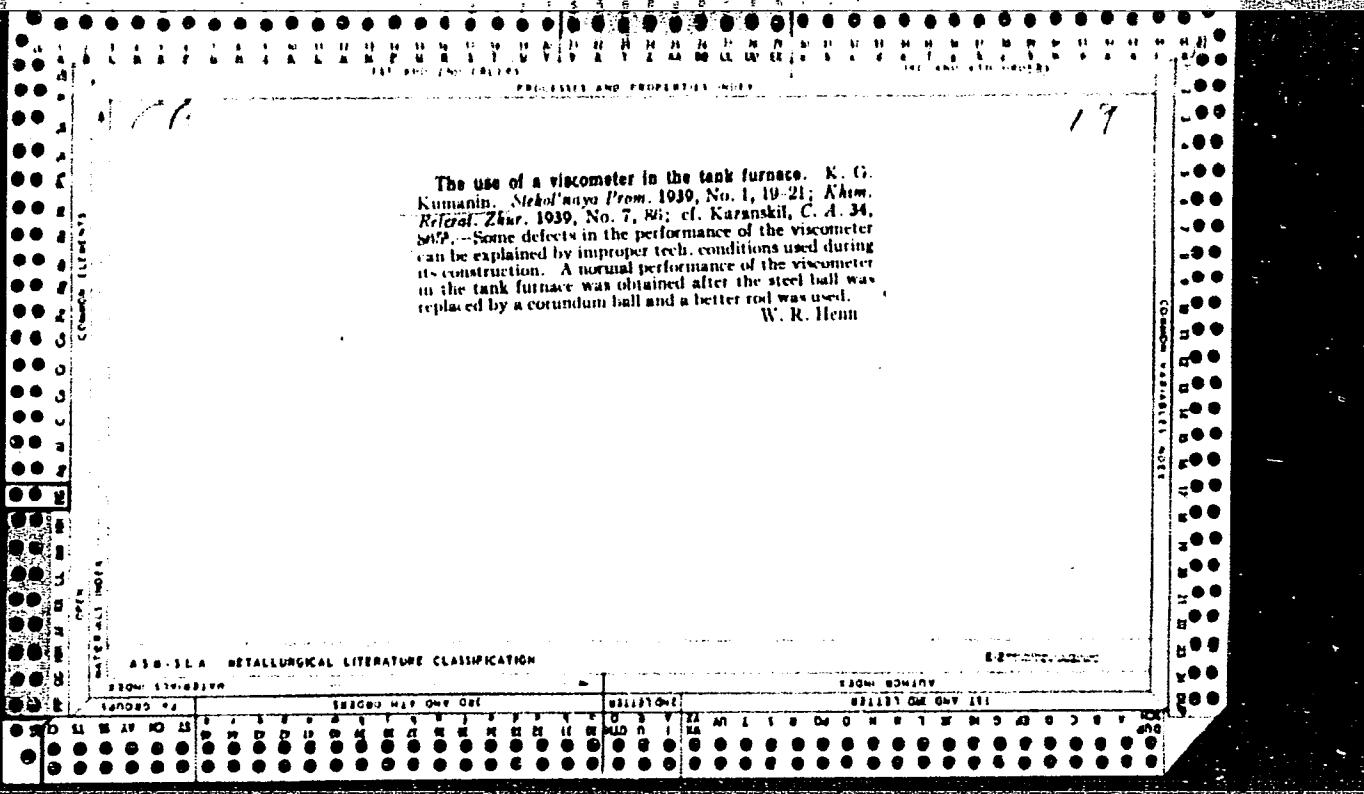




Investigation of the resistance of chamotte pieces to attack by fused glass. K. G. Kurnjanip. *Optika i Metal., Prom.*, 7, No. 6, 7 (1937); *Chem. Zentral.* 1937, II, 4222. In the prepn. of the chamotte pieces for testing, $\text{CoO} \cdot 1.27\%$ (CoO) is mixed with the mass as $\text{Co}(\text{NO}_3)_2$, decomposed with NH_3 . After firing, the porous test bars are heated in a glass melt. As a result of the soln. of the chamotte, CoO is dissolved in the glass. The depth of the color imparted to the glass in this way is a measure of the attack on the chamotte. M. G. Moore

19

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000927520001-5"



The use of a viscometer in the tank furnace. K. G. Kumanin. *Stekol'naya Prom.* 1939, No. 1, 19-21; *Khim. Referat. Zhur.* 1939, No. 7, 86; cf. Kazanskil, C. A. 34, 617. -- Some defects in the performance of the viscometer can be explained by improper tech. conditions used during its construction. A normal performance of the viscometer in the tank furnace was obtained after the steel ball was replaced by a corundum ball and a better rod was used.

W. R. Henn

Study of the effect of antimony trioxide on the purification and on a series of physicochemical properties of glass
K. G. Kurnin, *Optiko-Mekhan. Prom.* 9, No. 1, 5-10 (1930).—Sb₂O₃ introduced into a glass batch in the presence of KNO₃ and As₂O₃ is an excellent purifier for glasses which cannot be purified by KNO₃ and As₂O₃. Sb₂O₃ also has a favorable effect on the physical and chemical properties of glasses, and their absorption coefficient and their chem. resistance.

CH

19

AMER. METALLURGICAL LITERATURE CLASSIFICATION

ca.

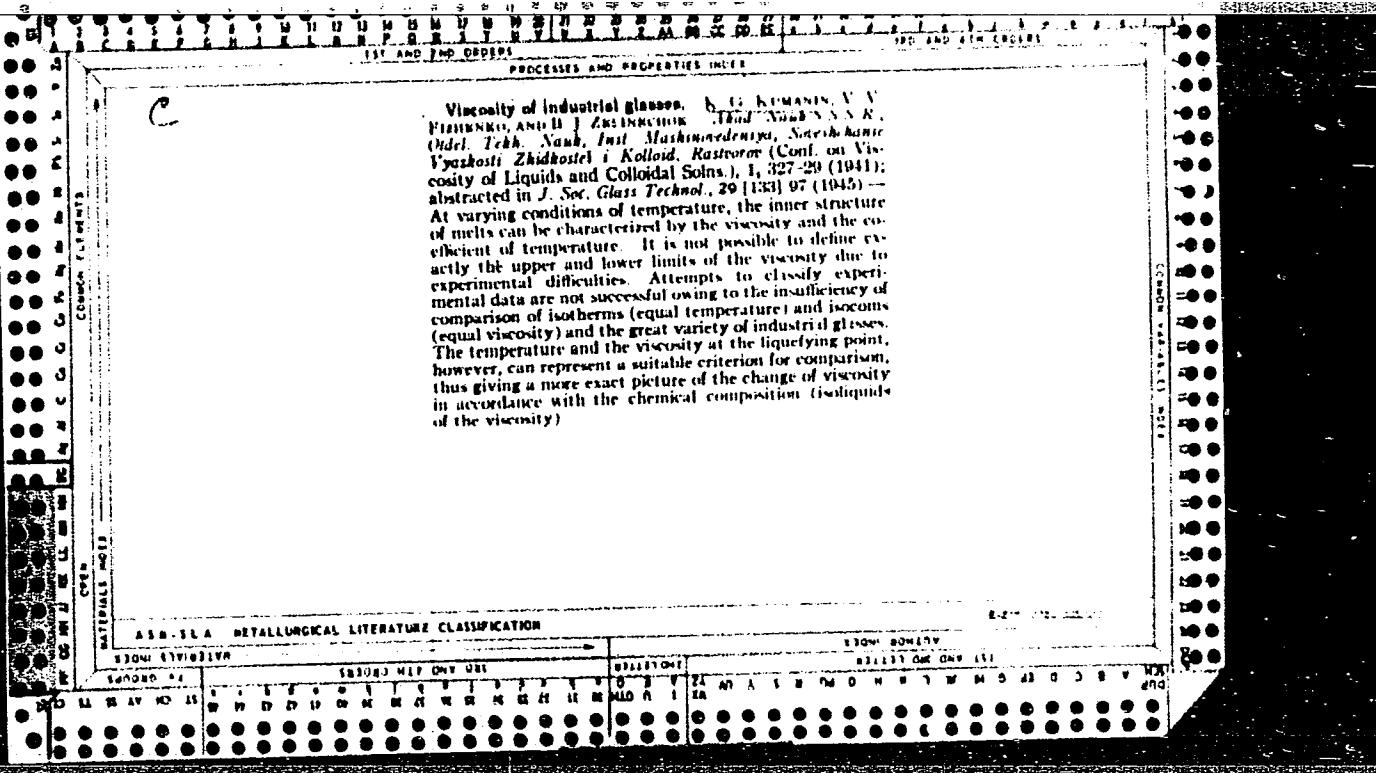
The structure and properties of glasses from the point of view of the phase rule, K. O. Kumanin, *Bull. Acad. sci. U. R. S. S., Ser. phys.*, 4, No. 4, 838-94 (in English, 584) (1940).—The ternary system $\text{Na}_2\text{O}-\text{BaO}-\text{SiO}_2$ was investigated by keeping the glass in a thermostat at a temp. of 20-40° above liquidus for considerable lengths of time. In most cases x-ray photographs were obtained which resembled the spectra of crystal substances. A characteristic spectrum corresponds to each crystal phase. The Debyeogram of glass can be regarded as the shadow of the 1st phase in the crystal state. During the crystallization of glass that phase is seen, in the field of which the given glass lies. The min. of crystall. ability of glasses of various compns. coincides with the transition of this compn. in the field of a new phase. The compn. points of limits with a low crystall. ability are distributed along the boundary lines. The internal structure of glass is composed of cybotactical groups whose structure is a single reflection of the structure of the 1st crystal phase of the given compn. Accurate investigations of the manifold properties of glasses (nonequill. cooled melted alkalies) show the discrete course of their change on the boundaries of the phase fields. Within the limits of 1 system or another a stable glass-like state is connected with the phase boundaries of the fields, triple points, etc., where during crystall. composition between the various crystal phases, often for 1 kind of mol., takes place. From the point of view of the phase rule, glass is the product of a nonequilibrium cooling of a melted soln.; however, for glass there exist an equil. and a nonequill. state. These 2 conceptions are defined by the terms burnt and tempered glass. W. H. Hera

W. H. Hess

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CA

1. APP. LIT. REPORT

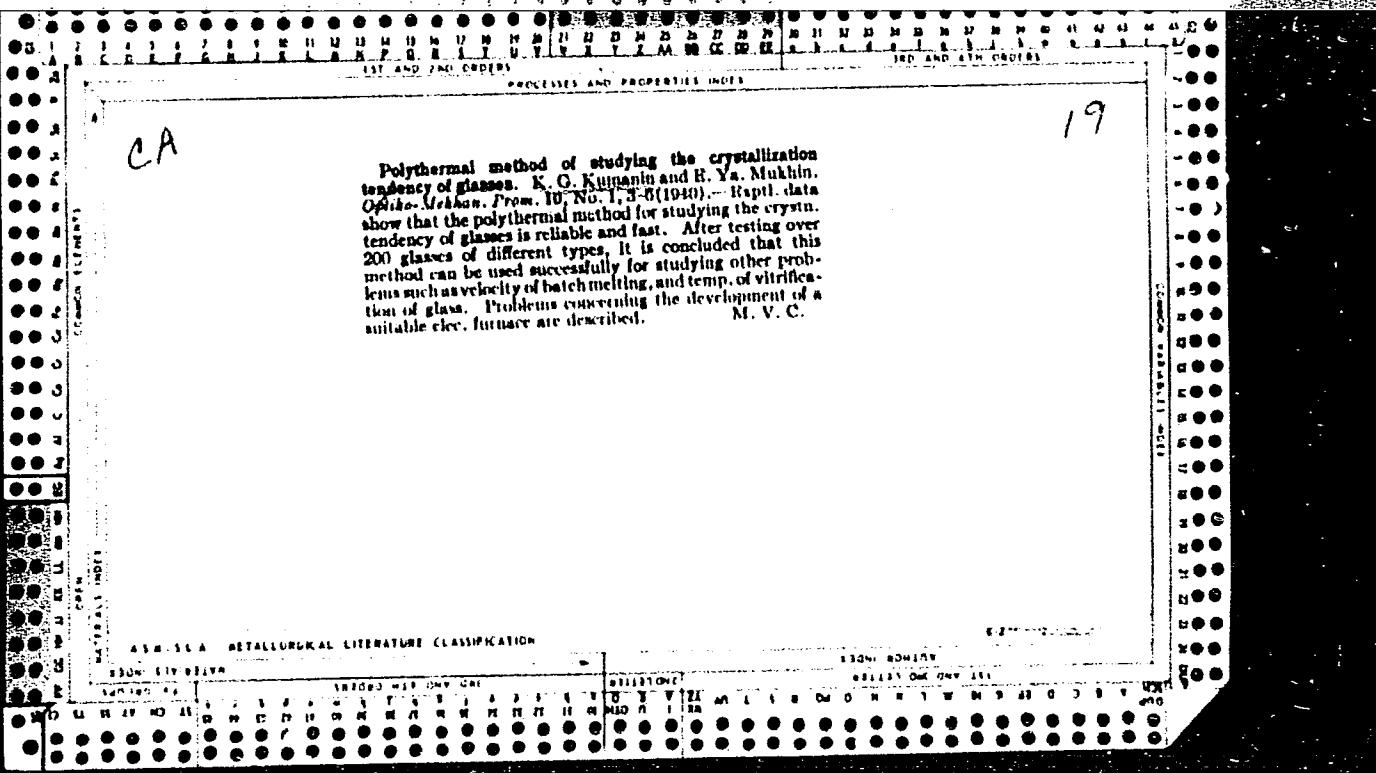
Remarks on the connection between viscosity and the diagram of melting. N. G. Kurnanin. Akad. Nauk S.S.R., Odz. Tekh. Nauk, Inst. Neftmashdaniya, Sverdlovsk. Vysokomol. Khimichesk. i Kolloid. Razdelenie (Conf. on Viscosity of Liquids and Colloidal Solns.) 8, 66-9 (1941) (Pub. 1945).—The discussion deals with the system Na₂O-BaO-SiO₂. The phase diagram of this system shows a synclise along the contact lines of Na₂O-Na₂O and BaO-SiO₂. The synclise is coupled with a considerable drop in temp. By constructing sections of viscosity isotherms with a const. content of SiO₂, there are obtained minima that correspond exactly to this synclise. At a 65 mol % content of SiO₂ this trough occurs at a BaO content of approx. 10 mol %. The lower the temp., the smaller is the angle made by the lines. At 1400° the line is practically straight. The more general type of viscosity isotherm is represented by curves such as are obtained by keeping the Na₂O at 15 mol %. Here as the BaO increases the viscosity isotherm drops. On the phase boundary of such a diagram there is a clear break in all the isotherms. Isocomes of the system were drawn on a phase diagram of this system. It can be seen from the resulting diagram that the location of the isocomes on the diagram is definitely connected with the nature of the diagram. M. H.

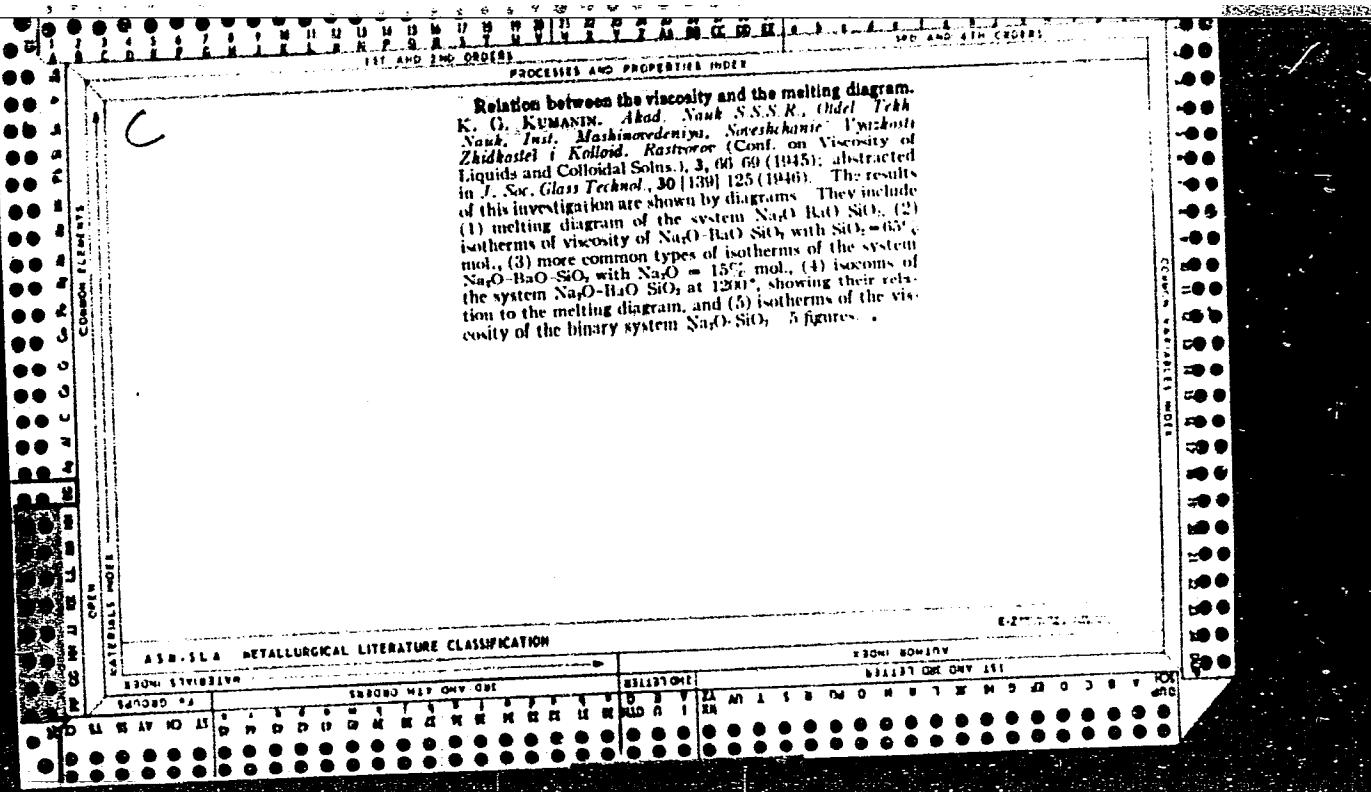
2.

ASA-11A METALLURGICAL LITERATURE CLASSIFICATION

CLASS NUMBER

SEARCHED	SERIALIZED	INDEXED	FILED	CLASS NUMBER	
				SEARCHED	SERIALIZED
1	2	3	4	5	6
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36
37	38	39	40	41	42
43	44	45	46	47	48
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55	56	57	58	59	60
61	62	63	64	65	66
67	68	69	70	71	72
73	74	75	76	77	78
79	80	81	82	83	84
85	86	87	88	89	90
91	92	93	94	95	96
97	98	99	100	101	102





ca 2

A labile thermoregulator. K. G. Kumanin, Zhur. Priklad. Khim. (J. Applied Chem.) 20, 1242-7(1947).-- A setup for thermal analysis, in which the heating current is controlled by a differential thermocouple, one hot junction of which is immersed in the substance investigated, the other in contact with the wall of the furnace, and the heating is regulated in such a way that the temp. difference Δt between the substance and the furnace is kept const. at all times. In the absence of a thermal effect in the substance, the heater raises the temp. uniformly at exactly the same rate at which the sample is heated by the higher temp. of the furnace; on appearance of an endothermal effect in the sample, the heating current decreases, so that the const. Δt is maintained. Heating and cooling curves recorded with this instrument show thermal arrests much more clearly than the usual differential thermographs. In particular, the level portions of isothermal processes are almost perfectly horizontal. The cooling curve of a ternary $\text{Na}_2\text{O}\text{-BaO}\text{-SiO}_3$ system shows, very distinctly, portions of clearly different slopes corresponding, resp., to cooling of the homogeneous liquid, crystallization of the 1st phase, simultaneous crystallization, crystallization of the eutectic (horizontal branch), and cooling of the solid. A curve recorded, on the same system, with the aid of the conventional instrument, shows, at most, only a faint indication of the eutectic arrest.

N. Thor

ASH-SEA METALLURGICAL LITERATURE CLASSIFICATION

Category : USSR/Optics - Optical technique

K-4

Abs Jour : Ref Zhur - Fizika, No 1, 1957, № 2229

Author : Kumanin, K.G., Kapustina, T.P.

Title : Determination of the Depth of the Matte Layer of Ground Glass by Polishing to a Wedge.

Orig Pub : Sb. statey leningr. in-ta tekhnichesk. i optiki, 1954, № 11, 42-51

Abstract : No abstract

Card : 1/1

KUMANIN, K.G., prof., red.; GORDON, G.G., inzh., red.; ANIKINA, M.S.,
red. izd-va; ZUDAKIN, I.M., tekhn. red.

[Shaping of optical surfaces] Formoobrazovanie opticheskikh
poverkhnostei; sbornik statei. Moskva, Oborongiz, 1962. 431 p.
(MIRA 15:7)

(Grinding and polishing) (Glass, Optical)

KUMANIN, Mikhail Fedorovich, general-leytenant; MILYUTIN, V.I., red.;
MUKHANOVA, M.D., tekhn. red.

[We are sending the ships to sea]Otpравляем в погоду корабли.
Moskva, Voenizdat, 1962. 99 p. (MIRA 16:3)
(Black Sea--World War, 1939-1945--Naval operations, Russian)

"APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000927520001-5

KUMANIN, V., master sporta

IUra Repin's record. Kryl.rod. 13 no.7:28 Jl '62.
(Airplanes--Models) (MIRA 16:2)

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000927520001-5"

KUMANIN, V., master sporta

Ukrainian sportsmen are the best. Kryl.rod. 13 no.11:25
N '62. (MIRA 15:12)
(Ukraine—Airplanes—Models)

KUMANIN, V. I.
AID Nr. 984-2 6 June

REFINEMENT OF Cr-Mo-V STEEL BY CERIUM (USSR)

Trusov, L. P., and V. I. Kumanin. Liteynoye proizvodstvo, no. 4, Apr 1963,
S/128/63/000/004/002/004
34-37.

The effect of cerium on the properties of a perlitic heat-resistant steel for service at 580°C and 240 atm has been investigated at the Central Scientific Research Institute of Technology and Machinery. Cerium was added as mishmetal (50% Ce, 25% La, 15% Nd, and 10% other rare-earth metals) either in furnace or ladle. It was found that 0.20% Ce decreased the total sulfur content, made the sulfide distribution more uniform, and reduced nonmetallic impurities by 30-45% and oxygen content by more than 50%. For tests of mechanical properties, the steel was annealed at 1080-1100°C for 2 hrs, aged at 740-750°C for 5 hrs, and air cooled. The addition of 0.20% Ce was found to increase the yield strength and tensile strength at 580°C from 38.2 to 41.5-42.1 kg/mm² and from 43.5 to 46-46.7 kg/mm², respectively. However, the highest notch toughness at room temperature, 13.2-16.2 kgm/cm², was obtained at 0.50-0.10% cerium. Also, the longest rupture life, 1255 or 363 hrs,

Card 1/2

AID Nr. 984-2 6 June

REFINEMENT OF Cr-Mo-V STEEL [Cont'd]

S/128/63/000/004/002/004

at 500°C under a stress of 20 kg/mm² was obtained with 0.05% cerium added in furnace or in ladle, respectively. In both cases the fracture was intergranular, while nonmodified steel had a transgranular fracture. The creep strength at 500°C and a creep rate of 10⁻⁵ % per hr was found to be 7 kg/mm², compared with 6 kg/mm² for the nonmodified steel. Oxidation resistance of the cerium-modified steels at 600, 650, and 700°C was found to be lower than that of the unmodified metal. [AZ]

Card 2/2

L 41015-66 EWT(m)/T/EWP(t)/EPI IJP(c) JD
ACC NR: AP6021707 (N) SOURCE CODE: UR/0148/66/000/003/0127/0131

AUTHOR: Blanter, M. Ye; Kumanin, V. I. 43B

ORG: All-Union Correspondence Machine Building Institute (Vsesoyuznyy zaochnyy mashino-stroitel'nyy institut)

TITLE: Effect of recrystallization on persistence of structural defects in deformed austenite

SOURCE: IVUZ. Chernaya metallurgiya, no. 3, 1966, 127-131

TOPIC TAGS: austenitic alloy, metal recrystallization, lattice defect, austenite transformation / N23G3 austenitic alloy

ABSTRACT: To clarify the question whether recrystallization may, to one extent or another, preserve the structural defects induced in a material during its deformation, the authors investigated this effect for the N23G3 austenitic alloy (0.04% C, 23.0% Ni, 3.11% Mn, remainder Fe), following annealing at 850°C and rolling at 200°C with 10, 20, 30, 40, 50 and 60% plastic deformation. After the deformation, the specimens (10x10x3 mm) were heated in a lead bath at 650, 700 and 750°C for from 15 sec to 2 hr, with subsequent quenching. To accomplish $\gamma \rightarrow \alpha$ transformation, this was followed by sharp cooling to -196°C with subsequent slow

UDC: 669.24'74:620.183

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L 41015-66

ACC NR: AP6021707

heating ($10^{\circ}\text{C}/\text{hr}$) to room temperature. The degree of structural imperfection of the alloy was estimated according to the changes in the physical broadening of X-ray line (311) and the microhardness of the recrystallized and nonrecrystallized grains. The amount of austenite and martensite in the alloy was estimated according to the ratio between the integral intensities of the lines $(\text{III})_{\gamma}$ and $(\text{II}0)_{\infty}$. The higher the degree DPD of plastic deformation is, the more complete is the degree β_{cr} of recrystallization at the moment of abrupt decrease in the number of defects (Fig. 1). Thus, following DPD = 30% and subsequent heating at 700°C , β_{cr}

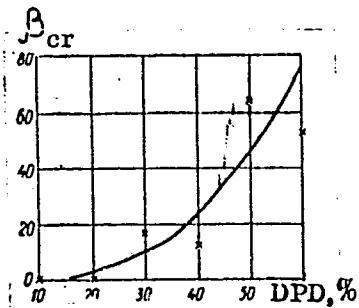


Fig. 1. Effect of degree of plastic deformation DPD on the intensity of recrystallization at the moment of the onset of a sharp decrease in the number of defects

Card 2/3

L 41015-66

ACC NR: AP6021707

decreases by 30% compared with β_{def} , and the microhardness of the first recrystallized grains is 102 kg/mm^2 , compared with 120 kg/mm^2 when DPD = 50%. This indicates a partial redistribution and disappearance of the defects in the course of polygonization even prior to the onset of recrystallization. The intensity of $\delta \rightarrow \alpha$ transformation is affected by the DPD of the austenite. When DPD = 60% the austenite undergoes stabilization, but when DPD = 40 and 20%, it undergoes destabilization; neither process, however, is complete at the end of recrystallization, thus providing yet another and highly significant proof of the persistence of part of defects in completely recrystallized material. Orig. art. has: 3 figures.

SUB CODE: 11, 20, 13/ SUBM DATE: 24Jun65/ ORIG REF: 008/ OTH REF: 001

Card 3/3 hs

ABRAMOV, V.V., doktor tekhn. nauk, prof.; ANTIKAYN, P.A., kand. tekhn. nauk, retsenzent; KUMANIN, V.I., inzh., red.; KOZLOV, A.P., red. izd-va; MODEL', B.I., tekhn. red.; DEMKINA, N.F., tekhn. red.

[Residual stresses and deformations in metals; calculations by the differentiation method] Ostatochnye napriazheniya i deformatsii v metallakh; raschety metodom raschlenenija tela. Moskva, Mashgiz, 1963. 354 p. (MIRA 16:8)
(Strains and stresses) (Metals--Testing)

TRUSOV, L.P.; KUMANIN, V.I.

Refining of heat-resistant Cr-Mo-V- steel with small additions of cerium.
Lit.proizv. no.4:34-37 Ap '63. (MIRA 16:4)
(Steel, Heat-resistant—Metallurgy)

VOLEOV, Yu.V.; VOLKOVA, Z.A.; KAYGOROPTSEV, L.M.; RRASLAVSKIY,
V.M., kand. tekhn. nauk, retsenzent; KUMANIN, V.I.,
inzh., rec.

[Durability of machines operating in an abrasive medium]
Dolgovechnost' mashin, rabotaiushchikh v abrazivnoi srede.
Moskva, Izd-vo "Mashinostroenie," 1964. 114 p.
(MIRA 17:6)

KUMANIN, V., mirovyy rekordsmen po aviamodel' nomu spertu.

"Flying wing" rubberband-powered high-speed plane model. Kryl.rod. 4 ne.7:
13-14 Jl '53.
(MLRA 6:?)
(Airplanes--Models)

KUMANIN, V.

Flying model airplane with flaps. Kryl.rod. 5 no.7:12 JI '54.
(Airplanes--Models) (MLRA 7:?)

KUMANIN, V.

AID P - 482

Subject : USSR/Aeronautics

Card 1/1 Pub. 58 - 11/15

Authors : Kumanin, V. and Ivanov, A.

Title : Pupils' Competition for Better Flying Models

Periodical : Kryl. rod., 9, 16, S 1954

Abstract : Remarks concerning the forthcoming aviation model competition.

Institution : None

Submitted : No date

KUMANIN, V.

AID P - 1079

Subject : USSR/Aeronautics

Card 1/1 Pub. 58 - 9/19

Authors : Kumanin, V., and others

Title : More attention to the sport of aircraft modeling.
(A letter to the editor)

Periodical : Kryl. rod., 12, 16, D 1954

Abstract : This is a complaint that aircraft modelers do not get enough attention from the Central Committee of the DOSAAF. The authors give reasons why this attention should be given and suggest improvements.

Institution : DOSAAF

Submitted : No date

KUMANIN, V.

AID P - 1269

Subject : USSR/Aeronautics

Card 1/1 Pub. 58 - 13/15

Author : Kumanin, V.

Title : High speed rubber powered model

Periodical : Kryl. rod., 2, 18-20, F 1955

Abstract : This description gives specifications of a model aircraft. In particular the author discusses: 1. the choice of the weight and dimensions of the model; 2. its design; 3. the selection of the power unit; 4. flying adjustments. Diagrams.

Institution : None

Submitted : No date

KUMANIN, V.

AID P - 5518

Subject : USSR/Aeronautics - Model building

Card 1/1 Pub. 58 - 9/17

Authors : Ryvkin, P., Head of the City of Moscow Model-building Laboratory, V. Kumanin, Master of Sports.

Title : What hinders the model-builders from developing their skills?

Periodical : Kryl. rod., 2, 17, F 1957

Abstract : An analysis of the causes of the Soviet model-building sportsmen lacking creative spirit in their approach to the problems of their sport. The necessity is stressed of a more systematic training of sportsmen interested in model-building.

Institution : None

Submitted : No date

KUMANIN, V., master sporta.

Model airplane builders at the start, Kryl, rod. 8 no. 5:20-21 My '57.
(Airplanes--Models) (MIRA 10:6)

KUMANIN, Vladimir Vladimirovich; YEFREMOVA, Ye.V., red.; KARYAKINA, M.S., tekhn.red.

[Fuselage airplane models with rubber motors] Fiuzeliazhnye modeli samoletov s rezinovymi dvigateliами. Moskva, Izd-vo DOSAAF, 1958. 71 p. (MIRA 12:7)
(Airplanes--Models)

Sov/85-58-8-30/40

AUTHOR: Kumanin, V., Master of Sports

TITLE: Build Hydroplane Models! (Stroyte gidromodeli!)

PERIODICAL: Kryl'ya rodiny, 1958, Nr 8, pp 25-26 (USSR)

ABSTRACT: The author describes the essentials of building a hydroplane model.
There are 4 drawings.

Card 1/1

KUMANIN, Vladimir Vladimirovich; YEFREMOVA, Ye.V., red.; MARTYNOV, B.B.,
red.; KARYAKINA, M.S., tekhn.red.

[Regulating and launching flying models] Regulirovka i zapusk
letaiushchikh modelei. Moskva, Izd-vo DOSAAF, 1959. 103 p.
(MIRA 13:2)
(Airplanes--Models)

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000927520001-5"

MAZNICHENKO, L., absolyutnaya championka Sovetskogo Soyuza po para-
shyutnomu sportu, master sporta; KUMANIN, V., master sporta;
KARAPETIAN, G., uportsmen 1-go razryada.

Learn how, teach others! Kryl.rod. 11 no.1:8 Ja '60.
(MIRA 13:5)
(Aeronautics--Study and teaching)

"APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000927520001-5

KUMANIN, V., master sporta, instruktor-aviamodelist

Models of our club. Kryl.rod. 12 no.9:Insert S '61. (MIRA 14:9)
(Airplanes-Models)

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000927520001-5"

KUMANIN, V., master sporta; LEBEDINSKIY, M.

Results of the contest of airplane models. IUn.tekh. 6
no.3:20-22 Mr '62. (MIRA 15:4)
(Airplanes--Models)

KUMANIN, Vladimir Vladimirovich, master sports SSSR; YEFREMOV, Ye.V.,
red.; MUKHINA, Ye.S., tekhn. red.

[Airplane models with rubber motors] Modeli samoletov s rezino-
vymi dvigateliами. Moskva, Izd-vo DOSAAF, 1962. 92 p.
(MIRA 16:2)

(Airplanes--Models)

MESHKOVA, I.N.; KUMAN'KOVA, S.A.; ISVETKOVA, V.I.; CHIRKOV, N.M.

Kinetics and mechanism of the polymerization of α -olefins on complex catalysts. Part 5: Kinetics of ethylene polymerization on $TiCl_4 - Al(iso-C_4H_9)_2Cl$. Vysokom. soed. 3 no.12:1816-1822 D '61. (MIRA 15:3)

1. Institut khimicheskoy fiziki AN SSSR.
(Ethylene) (Polymerization) (Catalysts)

KUMANOV, D.

Controllership

Actively help improve intra-departmental financial control. Sov. fin. 13, no. 6, 1952.

9. Monthly List of Russian Accessions, Library of Congress, September, 1952¹⁹⁵³; Uncl.

KUMANOV, D.

The first Soviet economics newspaper. Vop.ekon. no.10:173-176
O '57. (MIRA 10:12)
(Economics--Periodicals)

PALIEV, Khristo, KUMANOV, Kamen

Effect of Biovit-40, copper sulfate, and mic. element mixture
added to protein-deficient rations in pig fattening. Selskostop
nauka 2 no.1:82-91 '63.

ATARASOV, N.; NIKOLOV, K.; KUMANOV, Khr.

Kidney transplantation and our 1st animal experiments. Khirurgiia
(Sofilia) 18 no.42470-474 '65.

1. Klinika po urologia, Vissh peditsinski institut, Sofilia,
(direktor ~ dotsent St. Lambrev).

KUMANOV, L.

First editor of the first fire-prevention periodical. Pozh. delo 4
no. 6:21 Je '58.
(MIRA 11:5)
(Fire prevention)

KUMANOV, N.

KUMANOV, N. For a greater development of amateur radio. p. 9.

Vol. 5, No. 3, 1956.

RADIO

TECHNOLOGY

Sofia, Bulgaria

See: East European Accession, Vol. 6, No. 2, Feb. 1957

KUMANOV, M.

The initiators presented themselves well. p. 18 RADIO.
(Ministerstvo na poshtite, telegrafite, telefonite i
radioto i Tsentralniia suvet na dobrovlnata organizatsiia
za subeistvie na otbranata) Sofiya. Vol. 5, No. 4, 1956

SOURCE: East European Accessions List (EEAL) Library of
Congress, Vol. 5, No. 11, November 1956

KUMANOV, M.

The Voluntary Civil Defense Organization helped us. p. 9.
ZA RODINATA, Sofiya, Vol. 6, no. 4, Apr. 1956.

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 5, No. 6 June 1956,
Uncl.

KUMANOV, M.

Enthusiastic activity in the Plovdiv Radio Club. p.5.
(RADIO I TELEVIZIIA, Vol. 6, no. 4, 1957, Sofia, Bulgaria.)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 12, December 1957 Uncl.

KUMANOV, S.

KUMANOV, S.; CHESHNIKOV, B.

"Comparative Experiments with Rams, Oxen, and Buffaloes in Order to Establish
the Digestibility and Nutritive Value of Field Hay, Wheat Straw, and a Vetch-
Oats Mixture", p. 145, (IZVESTIYA, Vol. 3/4, 1952, Sofiya, Bulgaria).

SO: Monthly List of East European Accessions, IC, Vol. 3, No. 4, April 1954.

KUMANOV, S.

KUMANOV, S.; VULCHEV, P.

"Studies on the Affect of Sunflower, Cotton, Long Radish, and Corn Pellets Upon the Egg Production of Hens," p. 249. (IZVESTIIA, Vol. 3/4, 1952, Sofiya, Bulgaria).

SO: Monthly List of East European Acquisitions, LC, Vol. 3, No. 4, April 1954.

KUMANOV, S.

"Present Conditions of Feeding Livestock in Bulgaria and Measures for its Improvement." p. 47.
Izvestiia, Sofiya, Vol. 5, 1954

SO: East European Accessions List, Vol. 3, No. 9, September 1954, Lib. of Congress

KUMANOV, S.

"Preparing Forage During Winter." p. 18,
(KOOPERATIVNO ZEMEDELIE, Vol. 9, No. 9, 1954, Sofiya, Bulgaria)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4
No. 5, May 1955, Uncl.

KUMANOV, S.

"With the Medalists of the V.I. Lenin Agricultural Cooperative in the
Village of Kurtovo Konare." p. 20.
(KOOPERATIVNO ZEMEDELIE, Vol. 9, No. 9, 1954, Sofiya, Bulgaria)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4
No. 5, May 1955, Uncl.

KUMANOV, S.

"New Sources of Forage." p. 32,
(KOOPERATIVNO ZEMEDELIE, Vol. 9, No. 10, 1954, Sofiya, Bulgaria)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4
No. 5, May 1955, Uncl.

COUNTRY	Bulgaria
CATEGORY	Farm Animals, General Products.
ART. JOUR.	Zoobiol., No. 4, 1959, No. 16615
AUTHOR	BRATOV, St., Krasilnikova, L.; Shalman, S.
TYPE	Biotechnology & Fertility of the Nitrofertilizers
TITLE	The Studies of the Tobacco Plants as Food for Animals.
ORIG. PUB.	"Zochni sr. Vissz. na shkotop. Inst. na. Bisitrov." Zootekn. fak., 1956, 6, 139-141
ABSTRACT	According to data of a chemical analysis and experiments of digestibility, the nutritive value of 100 kg siloed tobacco plants equals 16 feed units. The digestibility was determined in an experiment with two rams. -- A. Berchtein
CARD:	1/1 *Institute of Agriculture.

KUMANOV, S.

KUMANOV, S. How many times are cows fed and milked a day? p. 28. Standard schedule
for hand-feeding sucking calves. p. 29.
Vol. 11, no. 8, Aug. 1956
KOOP. RASIVNO ZEM'EDELIE
AGRICULTURE
Sofia, Bulgaria

SO: East European Accession, Vol. 6, No. 3, March 1957

COUNTRY : BULGARIA
CATEGORY : Farm Animals.
 : Cattle.
ABS. JOUR. : RZhBiol., No. 6, 1959, No. 25826 Q
AUTHOR : Kumanov, Stefan; Ivanov, Nicho; Nestorov,*
INST. :
TITLE : The Possibility of Increasing Milk Yields and
 the Milk's Fat Content in Cows.
ORIG. PUB. : Selsko-sel'stvo, 1957, 2, No 10, 622-629
ABSTRACT : A review is presented which uses Soviet as
 well as Bulgarian experiences. The signifi-
 cance of such factors is stressed as the quan-
 tity and quality of fodder which increase milk
 yields and the percentage of fat, as well as
 the presence of such elements in feeds as Ca,
 P, K, S, Cl, Na, Mg, Fe, I, Cu, Mn, Co, and
 others, of vitamins A, C, D, and E, the pre-
 sence of various enzymes which are imperative
 for the synthesis of fat and vegetotropic sub-

CARD:

1/2

*Nikola

KUMANOV, S.

Combined silages. p. 29.
(KOOPERATIVNO ZEMEDELIE, No. 7, July 1957, Sofia, Bulgaria.)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 12, December 1957 Unclassified

KUMANOV, Stefan

6430/15

Author: Prof Stefan Kumanov

Title: "Silage Corn - A Valuable Fodder"

Source: Sofia, Kooperativno Selo, 26 Apr 61, p.2

Description: Article gives data on total area sown to corn, ~~xxxxxx~~ including area sown to corn for grain and corn for silage and fodder; gives figures in decares on area to be put under cultivation by 1965; cites sialge production figures for 1950, 1958, 1960, and plans for 1961, gives substantive data on results of tests carried out in recent years in regard to corn cultivation exclusively for silage. /Exceppt/

KUMANOV, Stefan, prof.; TODORV, N.; KRUSTEVA, E.

Conservation of the fresh alfalfa with dry chemical preparations.
Selskostop nauka 1 no.4/5:493-504 '62.

1. Vissh selskostopanski institut "G. Dimitrov" v Sofiia.

KURMANOV, Stefan, prof.; STOIANOV, Vladimir

Production and use of amidated beet slices. Selskostop
nauka 1 no.6:649-664 '62.

1. Vissh selskostopanski institut "G. Dimitrov" v Sofiiia.
2. Gl. redaktor, "Selskostopanska nauka".

"APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000927520001-5

KUMANOV, St.

Selection of cultivated plants in Holland. Selskostop nauka 1 no.7/8:
875-876 '62.

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000927520001-5"

KUMANOV, Stefan, prof.; ALEKSIEV, Aleksi

Digestibility of ground and whole grain rations for sheep
and goats. Selskostop nauka 1 no.10:1125-1130 '62.

1. Vissh selskostopanski intitut "Georgi Dimitrov" v Sofia.
2. Chl.-kor. na Bulgarskata akademija na naukite i gl. re-
daktor, "Selskostopanska nauka" (for Kumanov).

KUMANOV, Stefan, prof.

One-celled green algae as source of proteins. Selskostop
nauka 1 no.10:1150 '62.

1. Chlen-korespondent na Bulgarskata akademija na naukite
i gl. redaktor, "Selskostopanska nauka".

KUMANOV, Stefan

Problem of proteins in stockbreeding. Selskostop nauka 2
no.5/6 :493-504 "63.

KUMANOV, Stefan; ALEKSIEV, Aleksi; KRUSTEVA, Elena

Studies on the use of ammonia water in livestock feeding. Sel'skostop
nauka 2 no.8:985-992 '63

"APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000927520001-5

KUMANOV, Stefan.

The Eighth Congress of the Bulgarian Communist Party and the
development of agriculture. Selskostop nauka 2 no.1:1-4 '63.

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000927520001-5"

KUMANOV, Stefan; ALEKSIEV, Aleksı

Composition and nutrient value of sweet sorghum silage.
Sel'skostroj nauka 2 no.1:76-81 '63.

"APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000927520001-5

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Stockbreeding in Denmark. Selskostop nauka 2 no.10:1290-1296 '63.

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000927520001-5"

KUMANOV, Stefan; STOIANOV, Vladimir

Composition, digestibility, and nutrient value of feeding
stuff for hens. Izv Zhivotn nauki 1 no.1:7-18 '64.

1. Zootechnical Faculty of the G. Dimitrov Higher Agricultural
Institute, Sofia. 2. Responsible Editor and Member of the Board
of Editors, "Izvestiia na Akademiiata na selskostopanskie
nauki Zhivotnovudni nauki" (for Kumanov).

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Molasses as feed in fattening pigs for meat. Izv Zhivotn nauki 1 no.2:35-41 '64.

1. Zootechnical Faculty of the G. Dimitrov Higher Agricultural Institute, Sofia, Corresponding Member of the Bulgarian Academy of Sciences, and Chief Editor and Member of the Board of Editors, "Izvestiya nauki" (for Kumanov). 2. Institute of Animal Husbandry, Stara Zagora (for Andreev).

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Sovetskogo Soiuza Timur Mikhailovich Frunze. Moskva, 1960.
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SO: Monthly List of East European Accessions, LC, Vol. 3, no. 5, May 1954/Uncl.

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1. Instytut Energetyki, Warszawa.

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7 Jun 49

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Sum 71

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Acta chir. jugosl. 4 no.3:273-278 1957.

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(Predstojnik prof. dr. S. Kadrnka)

(COLON, radiography

bis(p-acetonyphenyl)-2-pyridylmethane-tannic acid contrast
medium with air insufflation, Welin's technic (Ser))

(CONTRAST MEDIA

bis(p-acetoxyphenyl)-2-pyridylmethane-tannic acid
radiography of colon, with air insufflation, Welin's technic
(Ser))

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Some contributions to the anthropogeographical bibliography, 1945-1950. p. 851
(GLASNIK, Vol. 2/3 1953/54 (Published 1957)

SO: Monthly List of East European Accessions (EEAL) LC Vol. 6, No. 12, Dec. 1957
Uncl.

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The present Yugoslav-Italian frontier under the terms of the London Memorandum on
the Agreement on Trieste and the newly annexed Istrian territory. p. 939.
(GLASNIK Vol. 2/3 1953/54 (Published 1957)

SO: Monthly List of East European Accessions (EEAL) LC Vol. 6, No. 12, Dec. 1957
Uncl.

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SO: Monthly List of East European Accessions (EEAL) LC Vol. 6, No. 12, Dec. 1957
Uncl.

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Anthropogeographical studies of Stara Pazova. p 147
(GLASNIC. Vol. 2/3, 1954/53 (Published 1957)

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Estonia - Plovers

Feed of the golden plover and its significance under the varying conditions of the forest zone where it is found. Zool. zhur. 32 No. 2, 1953.

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red.; VAREP, E., red.; TOOMSALU, E., red.

[Protection and planning of landscapes in the Estonian
S.S.R.; reports] Maastike kaitsest ja planeerimisest
Eesti NSV-s ; ettekanded. Tartu, Eesti NSV Teaduste
Akadeemia, 1964. 151 p. [In Estonian] (MIRA 18:7)

1. Nõupidamine maastike kaitse ja planeerimise küsimistes.
Tallinn, 1961.

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Birds of natural landscapes in southwestern Estonia. Trudy Zool.
inst.no.17:266-294 '55. (MLRA 8:10)
(Estonia--Birds)

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USSR/Scientific Organization--Conferences

Card 1/1 Pub. 86--10/35

Authors : Dement'ev, G. P.; Kumari, E. V.; and Saposhnikov, L. K.

Title : The work of Soviet ornithologists

Periodical : Priroda 44/1, 67--69, Jan 1955

Abstract : A account is given of the Second Conference of Ornithologists held in May of 1954 at the Tallin Institute of Zoology and Botany of the Academy of Sciences of the Estonian SSR. Various papers were read, the principle theme being the migration of birds and a study of the habits of birds with a view to solving some problems affecting the people's economy.

Institution :

Submitted :

KUMARI, E.

USSR/General Division - Conservation of Nature.

A-5

Abs Jour : Ref Zhur - Biologiya, No 7, 10 April 1957, 25764

Author : Kumari, E.

Inst :

Title : The Bird Sanctuary of Matsalu

Orig Pub : Okhota i okhotn. kh-vo, 1956, No 8, 24

Abst : The ornithological game sanctuary of Matsalu (Estonia) was instituted in 1954. Observations in the sanctuary have resumed on water birds, and ring marking is being carried out. An epidemiological study of the colony of common sea-gulls has begun. Preparations are being made to make a national park out of the sanctuary.

Card 1/1

KUMARI, E.V.

Results of coordinated observations on bird migrations in the Baltic
Sea region in the autumn of 1954 [with English summary in insert].
Zool.zhur.35 no.8:1214 1222 Ag '56. (MLRA 9:10)

1.Institut zoologii i botaniki AN Estonskoy SSR.
(Baltic Sea region--Birds--Migration)

KUMARI, E.V.

Plenary session of the Baltic Commission on the Study of Bird
Migration. Zool.zhur. 35 no.9:1439 S '56. (MLRA 9:12)
(Baltic States--Birds--Migration)